

Amendments to the Drawings:

Please accept the attached formal drawing sheet 2/8 inadvertently omitted from the set of formal drawings filed May 18, 2004.

REMARKS

This paper is submitted in response to the Office action mailed on May 4, 2007. This paper submits a formal drawing sheet inadvertently omitted from a prior filing. This paper also amends claims 1, 5, 6 and 9-22 and cancels claim 4. Accordingly, after entry of this Amendment and Response, claims 1-3 and 5-23 will be pending.

I. Claim Rejections Under 35 U.S.C. § 101

The Office Action rejects claims 9-22 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Applicant respectfully submits that claims 9-22 as amended fully comply with the requirements of 35 U.S.C. § 101.

Specifically, claims 9-22 are amended to recite a computer-readable medium, which is a physical structure. Further, the instructions recited in independent claims 9 and 18 cause the tangible result of configuring computer structure (partitionable tree structure) in accordance with received instructions (multiplication instruction decode).

As such, the Applicant respectfully submits that amended claims 9-22 are directed to statutory subject matter. Accordingly, withdrawal of the rejection is respectfully requested.

II. Claim Rejections Under 35 U.S.C. § 102

The Office Action rejects 1-23 under 35 U.S.C. § 102(b) over U.S. Patent No. 4,953,119 to Wong et al. (Wong). The Applicant respectfully traverses this rejection.

The Office Action cites the Abstract and figures 1-3 of Wong as the basis for rejection, without citing any textual support in Wong for asserting that the features recited in claims 1-23 are disclosed. The Applicant respectfully submits that this rejection fails to provide the requisite specificity to establish a proper basis for rejection. While the Applicant appreciates the general relevance of Wong as being directed to a multiplier circuit that is capable of providing either two 16 bit by 16 bit fixed point products or one 32 bit floating point product, the Applicant respectfully submits that no basis for the alleged anticipation of certain features recited in Applicant's claims can reasonably be ascertained from the rejection set forth in the Office Action and a careful review of Wong.

Independent claim 1 is amended to recite the features of original claim 4. As such, claim 1 recites an input format stage that formats one or more first input operands according to a type of multiply operation being performed by formatting bits corresponding to edges of each partitionable sub-tree structure according to the instruction type specifying the multiply operation being performed. The Applicant respectfully submits that Wong fails to disclose such features.

The Office Action asserts that "Wong formats the multiplier in accordance with that required for Booth encoding." However, Wong is silent with respect to any such formatting. In particular, neither the Abstract nor figures 1-3 of Wong indicate any formatting. Accordingly, the Office Action fails to cite any support in Wong for this assertion. The Office Action does not appear to rely on a theory of inherency. However, in any case, the Office Action fails to provide any factual basis or technical reasoning as would be required to do so. Thus, the Applicant respectfully submits that Wong fails to disclose formatting as asserted by the Office Action.

Assuming arguendo that Wong provides support for the Office Action's assertion, the assertion is that Wong formats "in accordance with that required for Booth encoding." However, independent claim 1 recites formatting one or more first input operands according to a type of multiply operation being performed by formatting bits corresponding to edges of each partitionable sub-tree structure according to the instruction type specifying the multiply operation being performed. Thus, the Office Action does not even assert that the alleged formatting in Wong is according to a type of multiply operation or according to the instruction type specifying the multiply operation, as recited in claim 1.

As such, the Office Action fails to establish a prima facie case of anticipation of claim 1 or claims 2, 3 and 5-8 depending therefrom.

Similarly, independent claim 9 recites formatting one or more first operands by formatting at least a least significant bit in each data partition, each data partition corresponding to a subtree, that is adjacent to another data partition, according to an instruction decode. Thus, for at least the reasons set forth above with respect to claim 1, the Office Action fails to establish a prima facie case of anticipation of claim 9 or claims 10-17 depending therefrom.

Similarly, independent claim 18 recites formatting bits of one or more first input operands corresponding to edges of each partitionable sub-tree structure according to the first multiplication decode or the second multiplication decode specifying the multiply operation being performed. Thus, for at least the reasons set forth above with respect to claim 1, the Office Action fails to establish a prima facie case of anticipation of claim 18 or claims 19-22 depending therefrom.

Similarly, independent claim 23 recites means for formatting data supplied to a booth encoder according to whether the instruction decode is a non-SIMD or SIMD instruction decode. Thus, for at least the reasons set forth above with respect to claim 1, the Office Action fails to establish a prima facie case of anticipation of claim 23.

Therefore, the Applicant respectfully submits that the rejection of claims 1-3 and 5-23 under 35 U.S.C. § 102(b) over Wong is improper and should be withdrawn. Accordingly, withdrawal of the rejection is respectfully requested.

III. Drawings

The Office Action objects to the drawings because the formal drawings filed May 18, 2004 failed to include sheet 2/8. The Applicant submits herewith the inadvertently omitted formal drawing sheet. Accordingly, withdrawal of the objection is respectfully requested.

IV. Conclusion

The Applicant thanks the Examiner for his thorough review of the application. The Applicant respectfully submits the present application, as amended, is in condition for allowance and respectfully requests the issuance of a Notice of Allowability as soon as practicable.

The Applicant believes no fees or petitions are due with this filing. However, should any such fees or petitions be required, please consider this a request therefor and authorization to charge Deposit Account No. 04-1415 as necessary.

If the Examiner should require any additional information or amendment, please contact the undersigned attorney.

Dated: July 27, 2007

Respectfully submitted,



Klifton L. Kime, Registration No. 42,733
Attorney for Applicant
USPTO Customer No. 66083

DORSEY & WHITNEY LLP
Republic Plaza Building, Suite 4700
370 Seventeenth Street
Denver, Colorado 80202-5647
Phone: (303) 629-3400
Fax: (303) 629-3450